Secretary Town Planning Board,
15/F North Point Government Office
No. 333 Java Road, Hong Kong
Date : 6 January, 2026

Dear sir,

Re: Yan Tak Kwun at No. 45, Tan Kwai Tsuen Hung Shui Kiu, Yuen Long, New Territories (Lot No. 3971 RP (Part) in D.D. 124)

(Planning Application No. Y/YL-TYST/11)

Refer to the departmental comments on 3 July 2025, we now FINAL respond to the comments of Point (i) , Point (ii) and Point (iii).

Comment of Point (i) :
We refer to the comment from Mainland North, Drainage Services Department.
(Please see the attachment A)

Comment of Point (ii) :
We refer to the comment from Environmental Department.
Planning Statement section 6.2(d)revised,6.2(e) added and 6.3.2 revised, portable toilet instruction manual attached. (Please see the attachment B)

Comment of Point (iii) :
We refer to the comment from Urban Design and Landscape,Planning Department
(Please see the attachment C)

Thank you for your kind attention.

YAT TAK KWUN MANAGEMENT LIMITED 一德觀管理有限公司

Yat Tak Kwun Management Co. Ltd.

**Drainage Proposal for Yat Tak Kwun at No. 45 Tan Kwai Tsuen, Hung Shui Kiu, Yuen Long, New Territories in D.D. No. 124 Lot 3971 R.P. for Town Planning Application No. TPB/A/YL-TYST/11**

## A. Background TPB/A/YL- TYST/11

Based on the drawings in the Town Planning Application A/YL-TYST/11 the application involves total site area of 1397 m2, and under the decision of the Town Planning Board, this drainage proposal is to be prepared in accordance with the comment from Chief Engineer/Mainland North, Drainage Services Department

## B. General Description of the Site

The subject site locates in Tan Kwai Tsuen abuting a footpath and a cycle track at the west. Total width of this footpath and a cycle track is over 6m. The other side of the cycle track is a 23m wide nullah separating the Tan Kwai village from Wo Ping Lane Road. The site, via a footbridge over the 23m wide nullah, is about 37m from the Wo Ping Lan San Tsuen Lane Road. Via the footpath and towards the north, the site is about 160 metre from the Castle Peak Road where a MTRC light rail station and the bus stops of several routes are located.

The total area of the site is 1397 $m^2$ and except 12 m of the boundary at the Southern side, the site is enclosed by solid wall of height 1.8m. At the back of the eastern side boundary wall there is an adjoining residential block separated by a footpath and a cover channel. The subject site is in general with ground kevel higher than the adjoining area by minimum 300mm.The attached location plan, extract of DSD record plan and record photographs include in **Appendix A** refer.

## C. Description of The Proposal

### Description of the Existing Drainage System and Environment

The lot is under New Grant No. 238 and is subject to the General Conditions and Special Conditions of Government Notification No. 364 of 1934 (G.N. 364) as amended by Government Notification No. 50 of 1940 and Additional Special Conditions. From Paragraph B and the nature of the lot, the drainage of the site may classified as Village Drainage Nature.and a 10-years storm event may be adopted in assessing the capacity of the required u-channel and drainage pipes.

The site will be effectively enclosed with solid wall upon the construction of the outstanding 12m long solid fence wall and also the site is of level higher than the surrounding area, only the surface run-off in the site will be considered in the drainage proposal.

Wong Him Sun, Authorized Person
Registered Structural Engineer

**Existing Storm Water Drain inside the site boundary**

The existing drainage system is composed of 6 numbers 750mm wide x 750mm long manholes with depth varies from 400mm to 1100mm. Connecting these manholes are PVC pipes with diameter varies from 300mm to 100mm. Despites the system is primitive and non-standard, the system had been operated and functioned over last 15 years without any adverse flooding report.

Connecting the terminal manhole to the adjoining DSD manhole SMH038647, a manhole about 5.5m from the fence wall, is a 300mm diameter WSD PVC pipes. Storm water from this DSD manhole SMH1038647 will be discharged via a 900mm diameter pipe into the 27m wide nullah about 25m away.

The existing drainage plan, extract of DSD record plan and record photographs include in **Appendix B** refer.

**Drainage Proposal**

The surface run-off of the site and its adjoining area shall be assessed Based on the topographic survey and hence distinguishing the surface run off regime, a drainage layout plan is proposed as shown in Appendix C. In this proposal the surface run-off shall flow directly along the pavement surface and discharged into those 150mm wide, 225 mm wide and 300 mm wide perimeter U-Channel and then directed into the modified drainage system. This 900 mm non-DSD U-channel shall direct the collected flow into the said nullah.

The capacity of the surface drains were checked and found to be adequate to divert the surface water of the area to the adjacent nullah and culvert. Design calculation attached in Appendix C refers.

## D. Design of the Drainage System

The proposal is prepared in accordance with the followings:

1. Code of Practice
a. Stormwater Drainage Manual by DSD
b. DSD standard drawing for sand trap shall be adopted

2. Material
a. All catch pits/ sand trap will be Grade 30/20 concrete
b. All U-channel if required will be Grade 30/20 concrete

3. Design assumption

**A. Storm water Drain**

i. 1 in 10 years return is adopted for the design of the U-channel
ii. 1 in 10 years return is adopted for the design of the drain between the terminal

catch pit and the discharge points at the existing public catchpit

iii. Manning's equation is adopted

iv. Rational Method is adopted in the assessing of the surface run off

v. Run off coefficient is adopted to be 0.95 where the area is paved with concrete or tiles, and 0.13--- where the area is covered up with grass or vegetation.

vi. Intensity-Duration-Frequency relationship is adopted in estimating the mean rainfall intensity.

**B.** **Sand trap design**

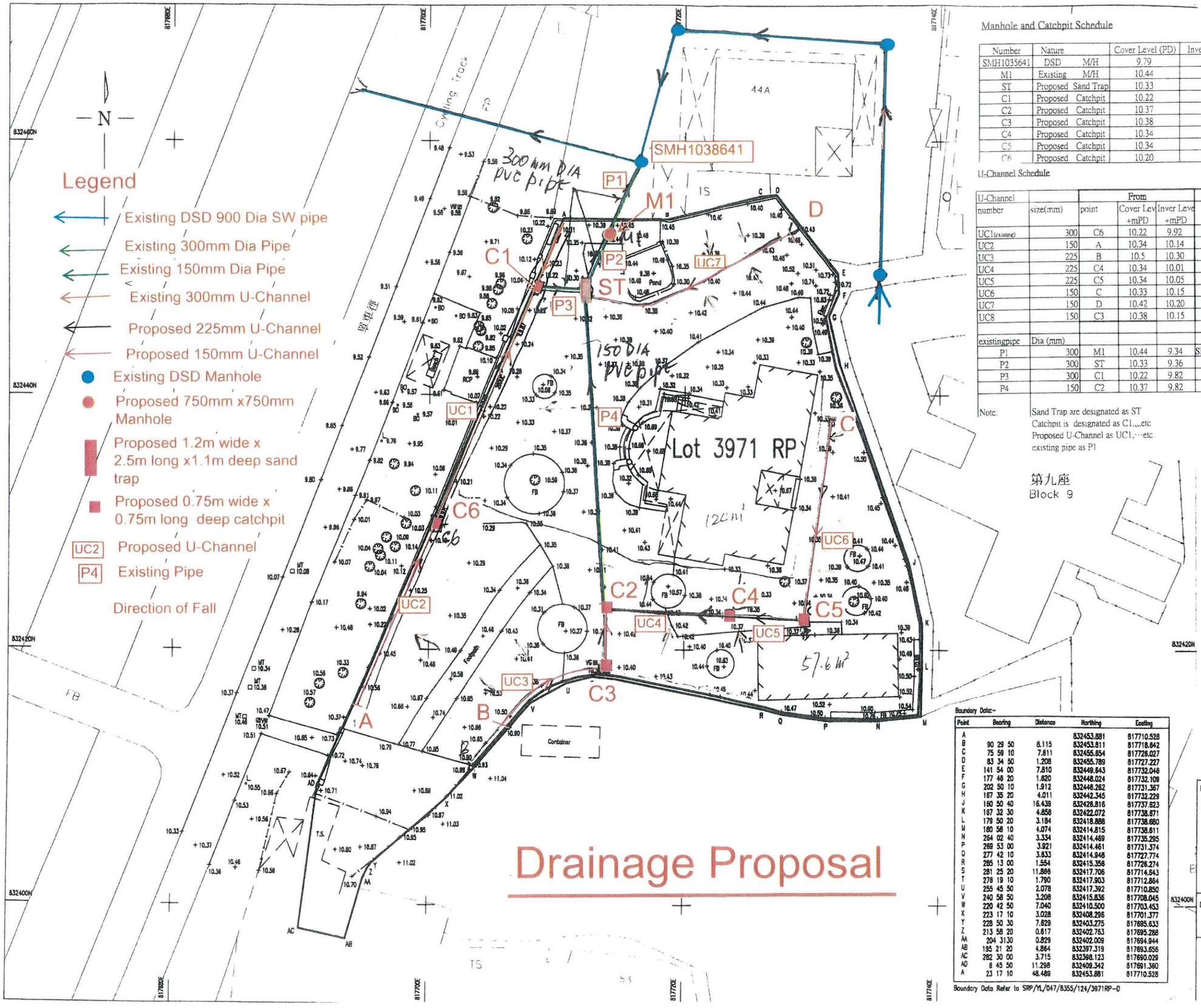
Design capacity of the sand traps is assumed to be able to provide 1 minute detention time for the water collected. Owing to the low silt content, this assumption shall be deemed to be adequate to screen off the surface water collected over the paved pavement. Detail design of the sand trap shall be referred to the Drainage Proposal included in Appendix A except that the detention time is to be 1 minute.

# Drawings

Drainage Layout Plan

&

Extract of Standard Drawings




Manhole and Catchpit Schedule

| Number | Nature | | Cover Level (PD) | Invert Level(PD) | Width(mm) | Length(mm) |
|---|---|---|---|---|---|---|
| SMH1035641 | DSD | M/H | 9.79 | 6.96 | | |
| M1 | Existing | M/H | 10.44 | 9.34 | 750 | 750 |
| ST | Proposed | Sand Trap | 10.33 | 9.26 | 1200 | 3250 |
| C1 | Proposed | Catchpit | 10.22 | 9.72 | 750 | 750 |
| C2 | Proposed | Catchpit | 10.37 | 9.72 | 750 | 750 |
| C3 | Proposed | Catchpit | 10.38 | 10.1 | 750 | 750 |
| C4 | Proposed | Catchpit | 10.34 | 9.9 | 750 | 750 |
| C5 | Proposed | Catchpit | 10.34 | 9.95 | 750 | 750 |
| C6 | Proposed | Catchpit | 10.20 | 9.82 | 750 | 750 |

U-Channel Schedule

| U-Channel number | size(mm) | From point | From Cover Lev +mPD | From Inver Leve +mPD | To point | To Cover Lev +mPD | To Inver Leve +mPD | Length m | Gradient |
|---|---|---|---|---|---|---|---|---|---|
| UC1(existing) | 300 | C6 | 10.22 | 9.92 | C1 | 10.22 | 9.82 | 20.0 | 0.005 |
| UC2 | 150 | A | 10.34 | 10.14 | C6 | 10.22 | 9.92 | 18.7 | 0.011765 |
| UC3 | 225 | B | 10.5 | 10.30 | C3 | 10.38 | 10.22 | 8.0 | 0.01 |
| UC4 | 225 | C4 | 10.34 | 10.01 | C2 | 10.37 | 9.95 | 8.5 | 0.007059 |
| UC5 | 225 | C5 | 10.34 | 10.05 | C4 | 10.34 | 10.01 | 5.8 | 0.006897 |
| UC6 | 150 | C | 10.33 | 10.15 | C5 | 10.34 | 10.05 | 15.5 | 0.006452 |
| UC7 | 150 | D | 10.42 | 10.20 | ST | 10.33 | 10.10 | 16.8 | 0.005952 |
| UC8 | 150 | C3 | 10.38 | 10.15 | C2 | 10.37 | 10.10 | 4.2 | 0.011905 |
| | | | | | | | | | |
| existingpipe | Dia (mm) | | | | | | | | |
| P1 | 300 | M1 | 10.44 | 9.34 | SMH1035641 | 9.79 | 8.50 | 5.5 | |
| P2 | 300 | ST | 10.33 | 9.36 | M1 | 10.44 | 9.34 | 3.5 | |
| P3 | 300 | C1 | 10.22 | 9.82 | ST | 10.33 | 9.80 | 3.6 | |
| P4 | 150 | C2 | 10.37 | 9.82 | ST | 10.33 | 9.70 | 24.3 | |

Note:
Sand Trap are designated as ST
Catchpit is designated as C1,,,,etc
Proposed U-Channel as UC1,···etc
existing pipe as P1

Boundary Data:-

| Point | Bearing | Distance | Northing | Easting |
|---|---|---|---|---|
| A | | | 832453.881 | 817710.528 |
| B | 90 29 50 | 8.115 | 832453.811 | 817718.642 |
| C | 75 59 10 | 7.811 | 832455.854 | 817726.027 |
| D | 83 34 50 | 1.208 | 832455.789 | 817727.227 |
| E | 141 54 00 | 7.810 | 832449.843 | 817732.046 |
| F | 177 48 20 | 1.620 | 832448.024 | 817732.109 |
| G | 202 50 10 | 1.912 | 832446.262 | 817731.367 |
| H | 167 35 20 | 4.011 | 832442.345 | 817732.229 |
| J | 160 50 40 | 16.439 | 832426.816 | 817737.623 |
| K | 167 32 30 | 4.858 | 832422.072 | 817738.671 |
| L | 179 50 20 | 3.184 | 832418.888 | 817738.680 |
| M | 180 58 10 | 4.074 | 832414.815 | 817738.611 |
| N | 264 02 40 | 3.334 | 832414.469 | 817735.295 |
| P | 269 53 00 | 3.921 | 832414.461 | 817731.374 |
| Q | 277 42 10 | 3.833 | 832414.948 | 817727.774 |
| R | 285 13 00 | 1.554 | 832415.358 | 817726.274 |
| S | 281 25 20 | 11.886 | 832417.706 | 817714.643 |
| T | 278 19 10 | 1.790 | 832417.903 | 817712.864 |
| U | 255 45 50 | 2.078 | 832417.392 | 817710.850 |
| V | 240 58 50 | 3.208 | 832415.836 | 817708.045 |
| W | 220 42 50 | 7.040 | 832410.500 | 817703.453 |
| X | 223 17 10 | 3.028 | 832408.298 | 817701.377 |
| Y | 228 50 30 | 7.829 | 832403.275 | 817695.633 |
| Z | 213 58 20 | 0.617 | 832402.763 | 817695.288 |
| AA | 204 31 30 | 0.829 | 832402.009 | 817694.944 |
| AB | 195 21 20 | 4.864 | 832397.319 | 817693.656 |
| AC | 282 30 00 | 3.715 | 832398.123 | 817690.029 |
| AD | 8 45 50 | 11.298 | 832409.342 | 817691.360 |
| A | 23 17 10 | 48.489 | 832453.881 | 817710.528 |

Boundary Data Refer to SRP/YL/047/B355/124/3971RP-D

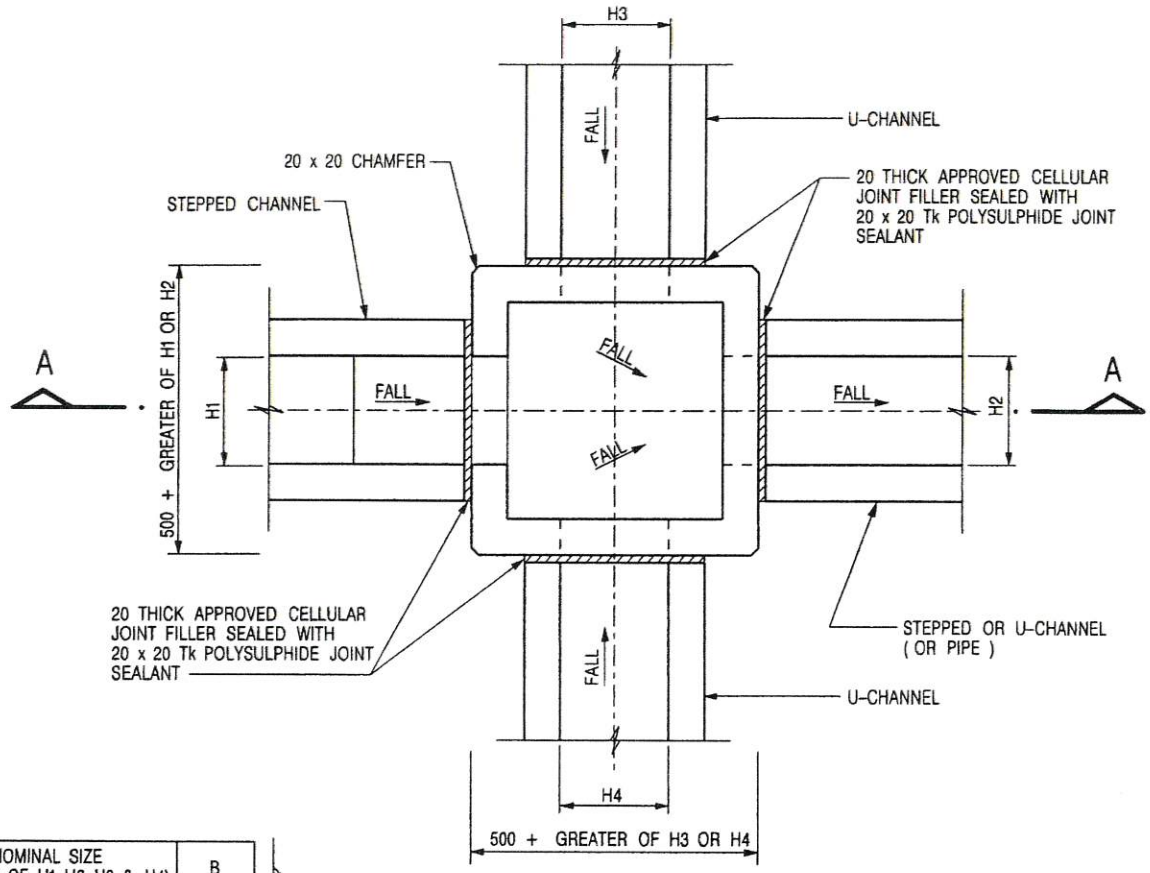
Drawing Title

Drainage proposal for
Lot 3971 RP in D.D.124
45 Tan Kwai Tsuen, Hung Shui Kiu

Drawing No. HPL3507/TS/01

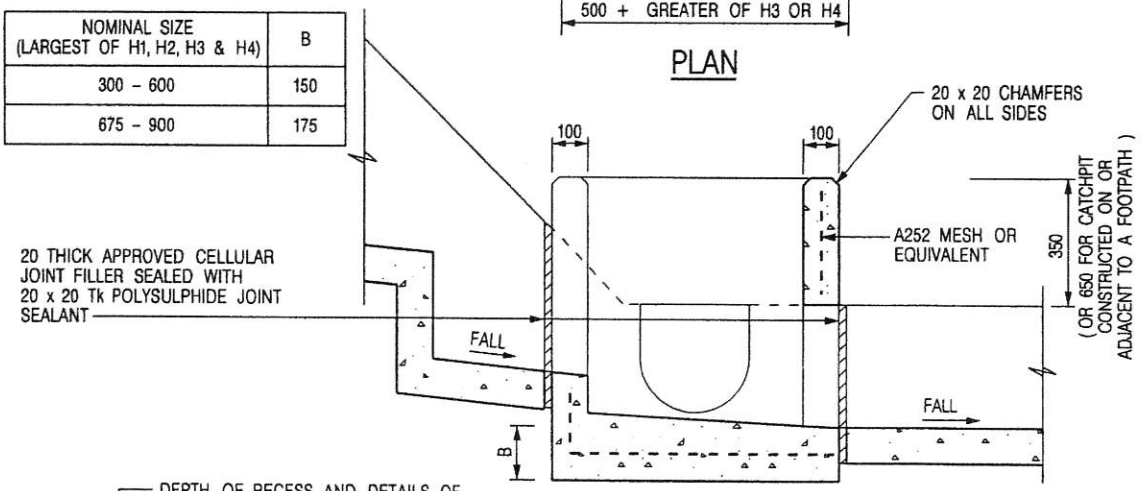
Scale 1:200(A2)

Helen Chan Professional Land Survey Ltd.
陳婉琪測量師行有限公司
2/F, No.36 Lung Sum Avenue, Sheung Shui, N.T., Hong Kong
Tel: 26395466 Fax: 26734966
e-mail: hcpls@netvigator.com

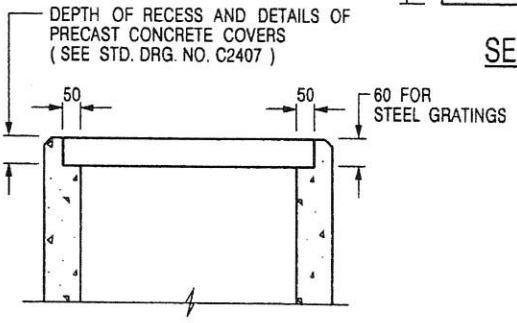



PLAN

| NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4) | B |
|---|---|
| 300 – 600 | 150 |
| 675 – 900 | 175 |




SECTION A – A




ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

| REF. | REVISION | SIGNATURE | DATE |
|---|---|---|---|
| – | FORMER DRG. NO. C2405J. | Original Signed | 03.2015 |

# STANDARD CATCHPIT DETAILS

(SHEET 1 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

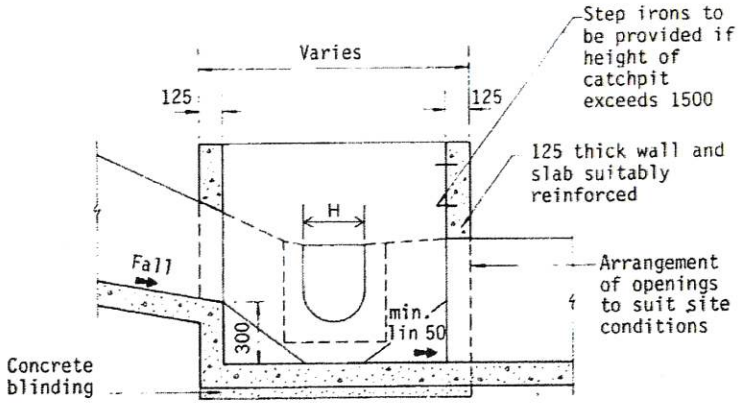
DATE JAN 1991

DRAWING NO. C2405 /1

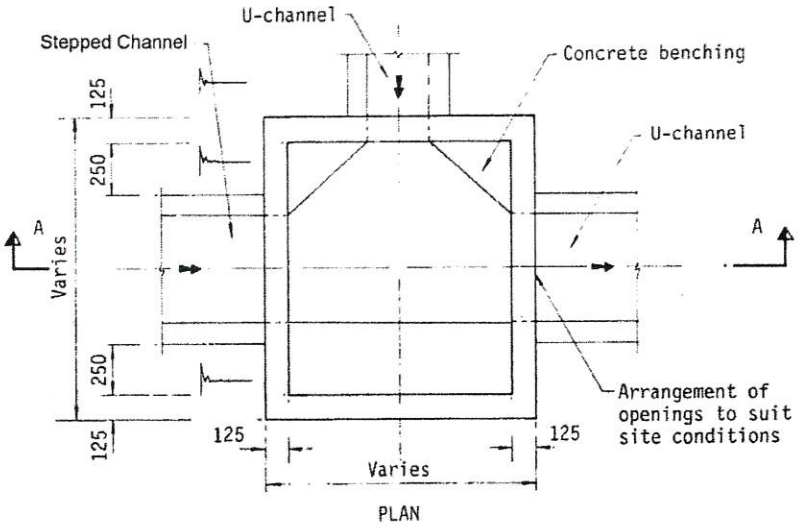
卓越工程 建設香港

We Engineer Hong Kong's Development

# Appendix A

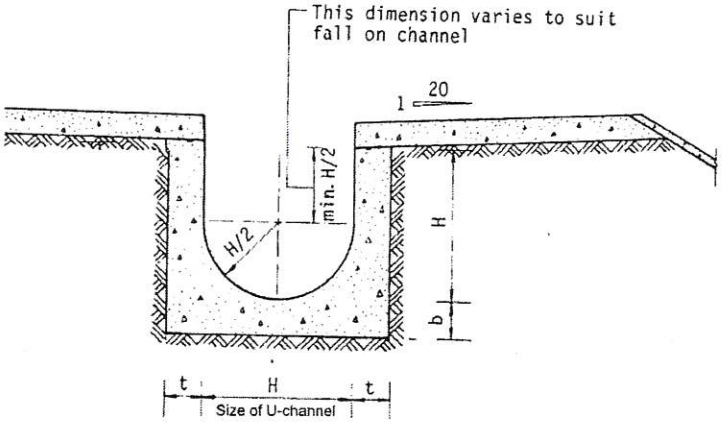



SECTION A-A

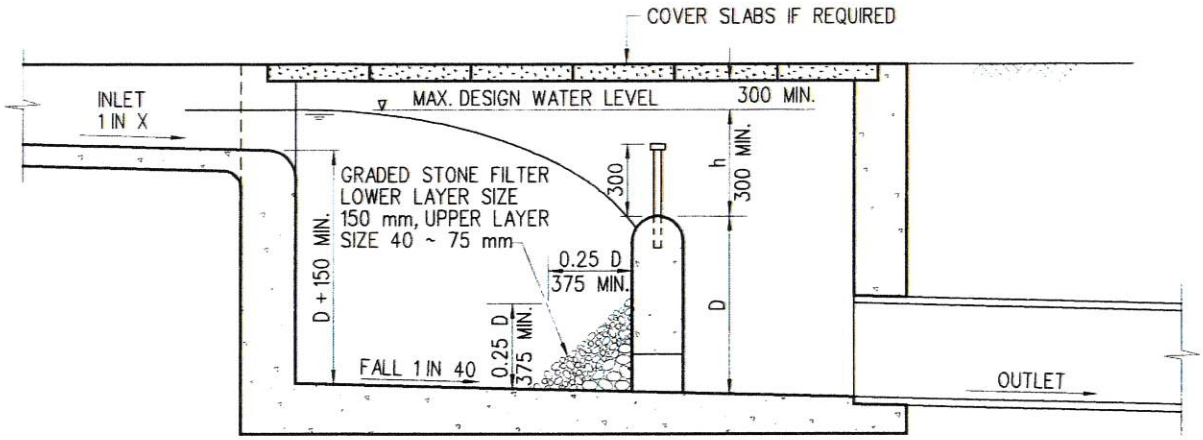



PLAN

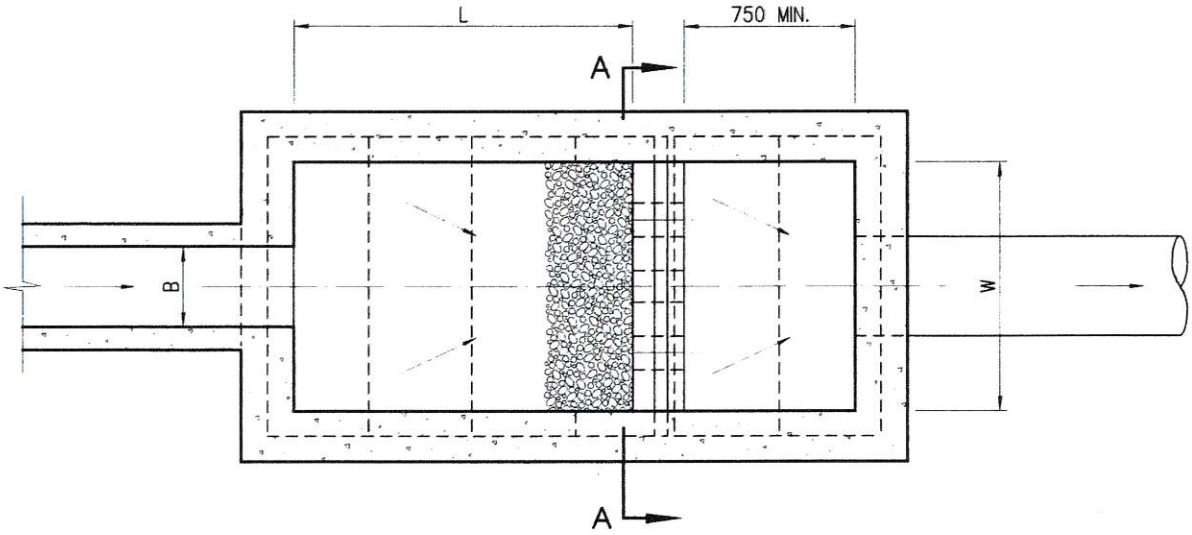
TYPICAL DETAILS OF CATCHPIT



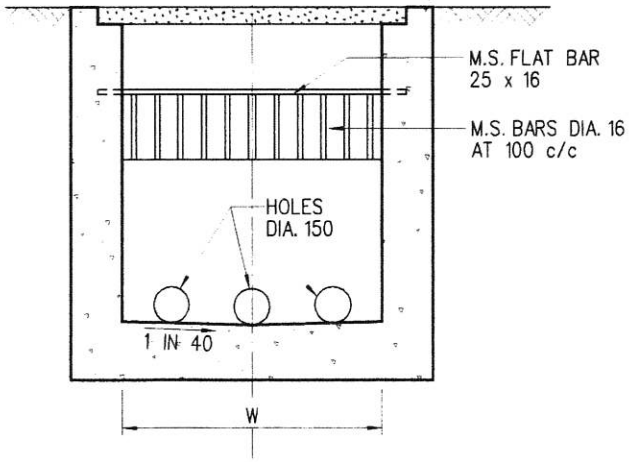

TYPICAL DETAILS OF U-CHANNEL




## LONGITUDINAL SECTION




## PLAN




## SECTION A-A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. NORMALLY FOR DRAINS OF 900 mm DIA. AND BELOW. FOR BIGGER DRAINS AND STEEP TERRAIN, SAND TRAP SHOULD BE SPECIALLY DESIGNED.
3. SIZE
   DEPTH : $D \leqslant 750$
   WIDTH : $W \geqslant 3B$
   LENGTH : $4.8D^{0.67}\ h^{0.5}\ X^{-0.5} \geqslant 4B$
4. GRADED STONE FILTER SHALL BE CRUSHER RUN GRANITE AGGREGATE.
5. CAPACITY D W L TO BE ACCORDING TO SIZE AND NATURE OF CATCHMENT, PROVIDING DETENTION TIME NOT LESS THAN 5 MINUTES FOR MAX. DESIGN FLOW OF INLET.

| REV. | DESCRIPTION | SIGNATURE | DATE |
|---|---|---|---|
| B | REDRAWN BY CAD | ORIGINAL SIGNED | 8.8.2001 |
| A | GENERAL REVIEW | ORIGINAL SIGNED | 2.2.2001 |

# SAND TRAP

DRAINAGE SERVICES DEPARTMENT

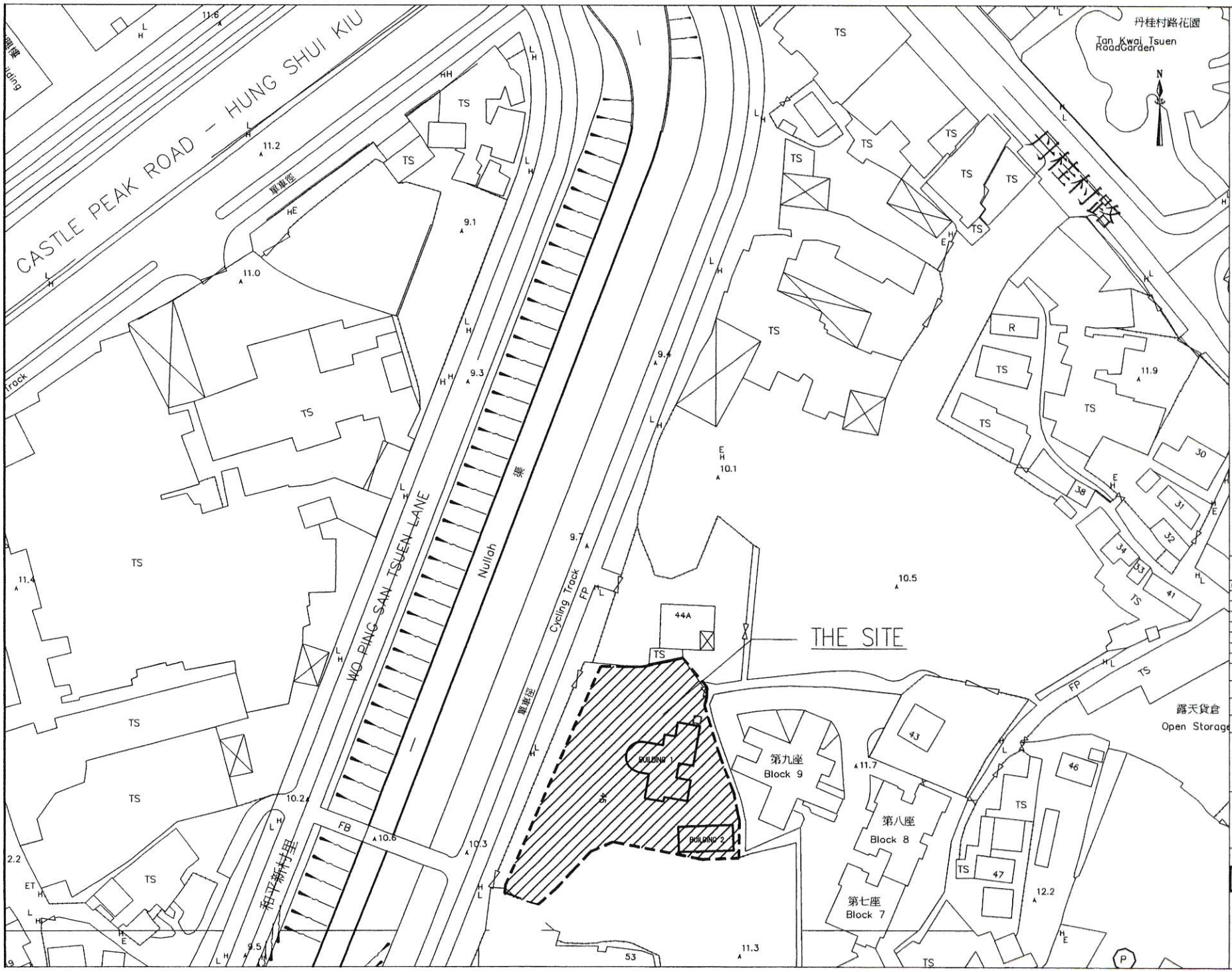
REFERENCE

SCALE
DIAGRAMMATIC

DRAWING No.
DS 1025B

# Appendix A

APPENDIX A




| REVISIONS | | | INITIAL / DESIGNATION | | |
|---|---|---|---|---|---|
| NO. | DATED | DESCRIPTION | DRN | CKD | AUTH |
| | | | | | |

| | NAME & DESIGNATION | INITIAL | DATE |
|---|---|---|---|
| AUTHORISED | | | |
| CHECKED | | | |
| DRAWN | | | |

PROJECT

REZONING APPLICATION FOR YAT TAK KWUN AT NO. 45 TAN KWAI TSUEN, HUNG SHUI, PING SHAN, YUEN LONG, NEW TERRITORIES IN D.D. NO. 124 LOT 3971 R.P.

DRAWING TITLE

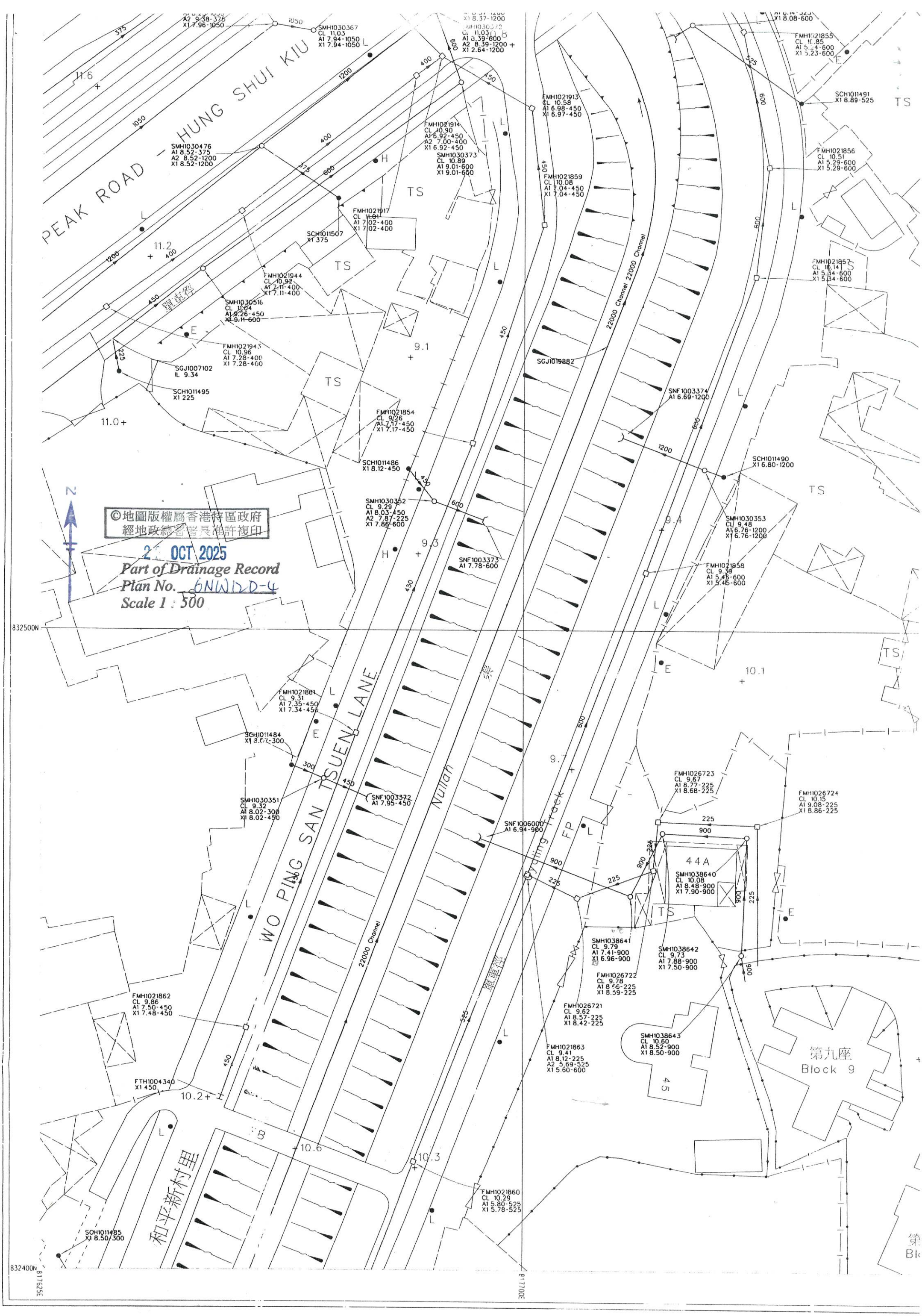
SITE LOCATION PLAN

SCALE 1:1000 (A4)

DRAWING NO. 4420-GP-01 -


DERKON CONSULTANT LTD.

Flat E1, 11/F, Wong King Industrial Building, 2-4 Tai Yau Street, San Po Kong, Kowloon, Hong Kong
Tel: 3177 5768 Fax: 2151 1018
E-mail address: office@derkon.com.hk






Please note that drainage information is now available in the GeoInfo Map service.


03/01/2018

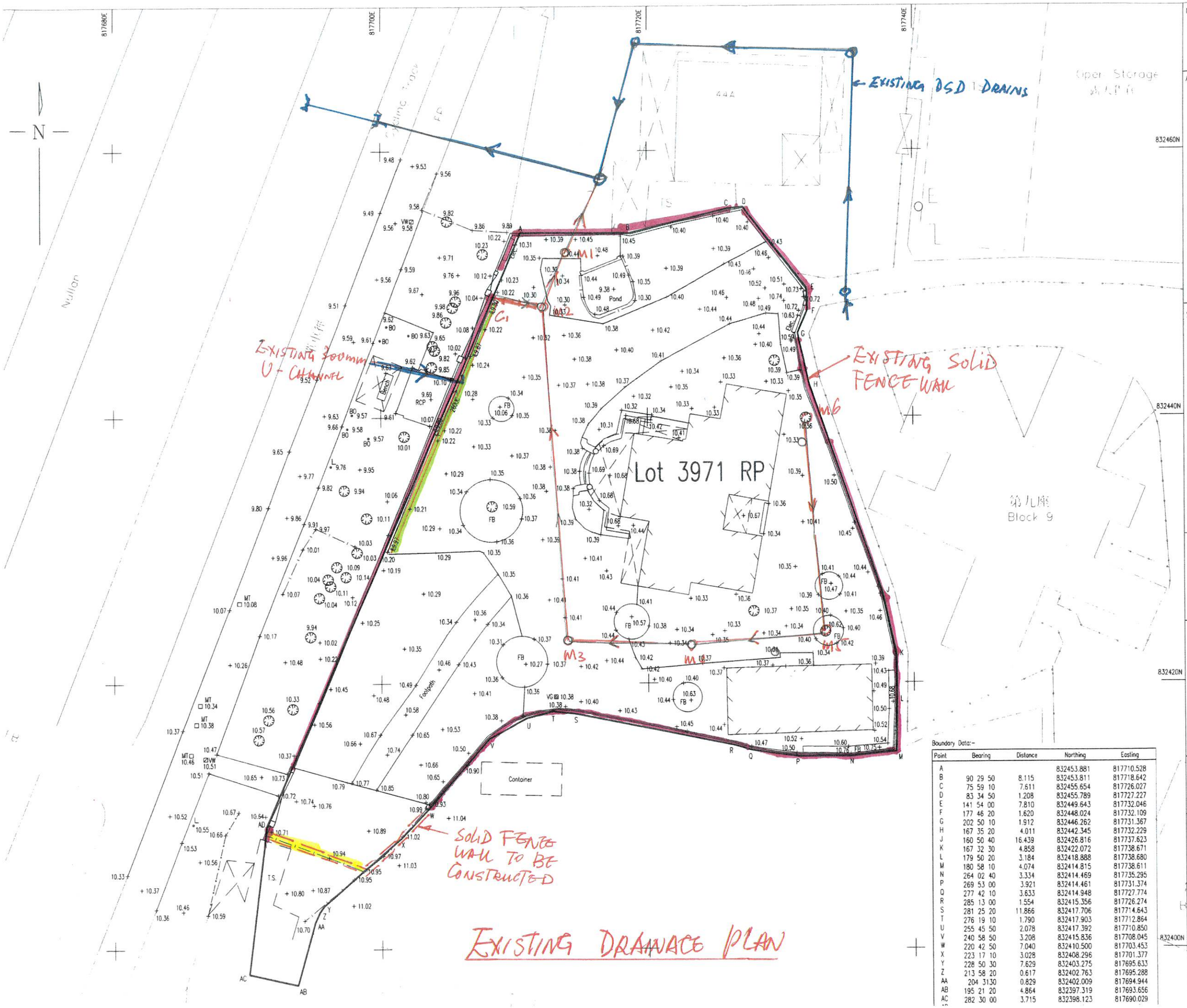

03/01/2018


03/01/2018


03/01/2018

# Appendix B

APPENDIX B




EXISTING DRAINAGE PLAN

Notes

1. Hong Kong Geodetic Datum 1980
2. All levels refer to Principal Datum Hong Kong
3. All units are in Metres
4. All spot level positions are indicated by the decimal point or a cross.

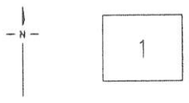
Abbreviations

| | | | |
|---|---|---|---|
| BB | SIGN BOARD | ME | MANHOLE (ELECTRIC) |
| BD | BOULDER | MF | MANHOLE (FOUL WATER) |
| BH | BORE HOLE | MH | MANHOLE |
| BO | BOLLARD | MP | METER POST |
| CB | CONCRETE BLOCK | MS | MANHOLE (STORM WATER) |
| CL | COVER LEVEL | MT | MANHOLE (TELEPHONE) |
| CO | COLUMN | RCP | REFUSE COLLECTION POINT |
| CP | CATCHPIT | SC | STEP CHANNEL |
| CUL | CULVERT | SHR | SHRINE |
| DP | DRAW PIT | SP | SIGN POLE |
| EB | ELECTRIC BOX | ST | STOOL |
| EP | ELECTRICITY POST | TC | TELEPHONE CHAMBER |
| ESS | ELECTRIC SUB-STATION | TL | TRAFFIC LIGHT |
| ET | ELECTRIC TRANSFORMER | TP | TELEPHONE POLE |
| FB | FLOWER BED | TS | TEMPORARY STRUCTURE |
| FH | FIRE HYDRANT | TV | MANHOLE (CABLE TV CO) |
| FIG | FEEDS INTO GROUND | UC | U CHANNEL |
| FP | FOOTPATH | V | VALVE |
| GA | GRATING | VF | VALVE FIRE |
| GU | GULLY | VG | VALVE GAS |
| IC | INSPECTION COVER | VT | VENT |
| IL | INVERT LEVEL | VW | VALVE-WATER WORKS |
| LB | LETTER BOX | WT | WATER TANK |
| L | LAMP POST | WP | WATER POINT |

Symbols

- ARTIFICIAL SLOPE
- BOUNDARY LINE
- BOUNDARY POINT
- BOULDER
- CANOPY
- 5 CONTOUR (5m)
- 1 CONTOUR (1m)
- DRAIN
- FENCE/RAILING
- FREE STANDING WALL
- GATE
- H HOARDING
- SLOPE TOP / BOTTOM LANDSLIDE SCAR
- S SEPTIC TANK
- STEPS
- TREE
- 150UC U-CHANNEL WITH FLOW & SIZE
- VERTICAL CUTTING

Sheet Index




Approved

Helen Chan
ALS, MHKIS, MRICS, R.P.S.(LS)
Date: November 7, 2025

Boundary Data:-

| Point | Bearing | Distance | Northing | Easting |
|---|---|---|---|---|
| A | | | 832453.881 | 817710.528 |
| B | 90 29 50 | 8.115 | 832453.811 | 817718.642 |
| C | 75 59 10 | 7.611 | 832455.654 | 817726.027 |
| D | 83 34 50 | 1.208 | 832455.789 | 817727.227 |
| E | 141 54 00 | 7.810 | 832449.643 | 817732.046 |
| F | 177 46 20 | 1.620 | 832448.024 | 817732.109 |
| G | 202 50 10 | 1.912 | 832446.262 | 817731.367 |
| H | 167 35 20 | 4.011 | 832442.345 | 817732.229 |
| J | 160 50 40 | 16.439 | 832426.816 | 817737.623 |
| K | 167 32 30 | 4.858 | 832422.072 | 817738.671 |
| L | 179 50 20 | 3.184 | 832418.888 | 817738.680 |
| M | 180 58 10 | 4.074 | 832414.815 | 817738.611 |
| N | 264 02 40 | 3.334 | 832414.469 | 817735.295 |
| P | 269 53 00 | 3.921 | 832414.461 | 817731.374 |
| Q | 277 42 10 | 3.633 | 832414.948 | 817727.774 |
| R | 285 13 00 | 1.554 | 832415.356 | 817726.274 |
| S | 281 25 20 | 11.866 | 832417.706 | 817714.643 |
| T | 276 19 10 | 1.790 | 832417.903 | 817712.864 |
| U | 255 45 50 | 2.078 | 832417.392 | 817710.850 |
| V | 240 58 50 | 3.208 | 832415.836 | 817708.045 |
| W | 220 42 50 | 7.040 | 832410.500 | 817703.453 |
| X | 223 17 10 | 3.028 | 832408.296 | 817701.377 |
| Y | 228 50 30 | 7.629 | 832403.275 | 817695.633 |
| Z | 213 58 20 | 0.617 | 832402.763 | 817695.288 |
| AA | 204 3130 | 0.829 | 832402.009 | 817694.944 |
| AB | 195 21 20 | 4.864 | 832397.319 | 817693.656 |
| AC | 282 30 00 | 3.715 | 832398.123 | 817690.029 |

Client

Yat Tak Kwun Management Limited

Drawing Title

Topographic Survey of
Lot 3971 RP in D.D.124
45 Tan Kwai Tsuen, Hung Shui Kiu

| Drawing No. | Scale |
|---|---|
| HPL3507/TS/01 | 1:200(A2) |

Helen Chan Professional Land Survey Ltd.

6-NW-12D-3



PEAK ROAD – HUNG SHUI KIU

SAN TSUEN LANE

WO PING STREET

和平新村里

Nullah

22000 Channel

Cycling Track

FP

FB

832500N

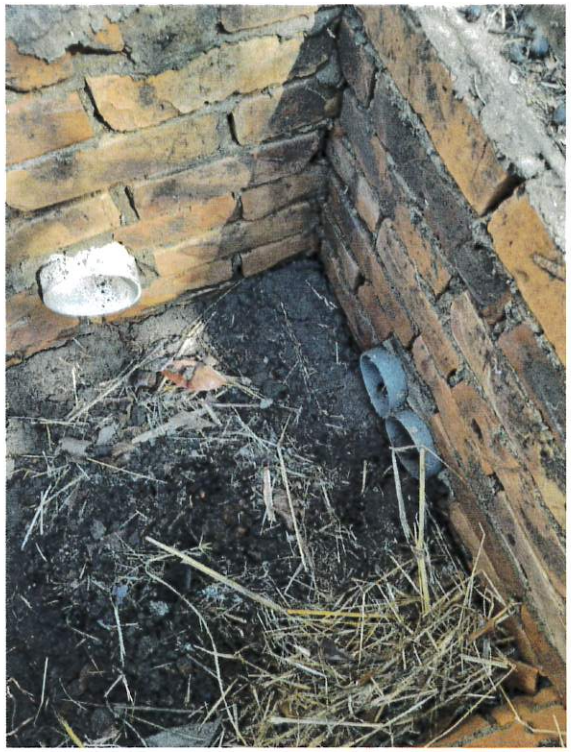
832400N

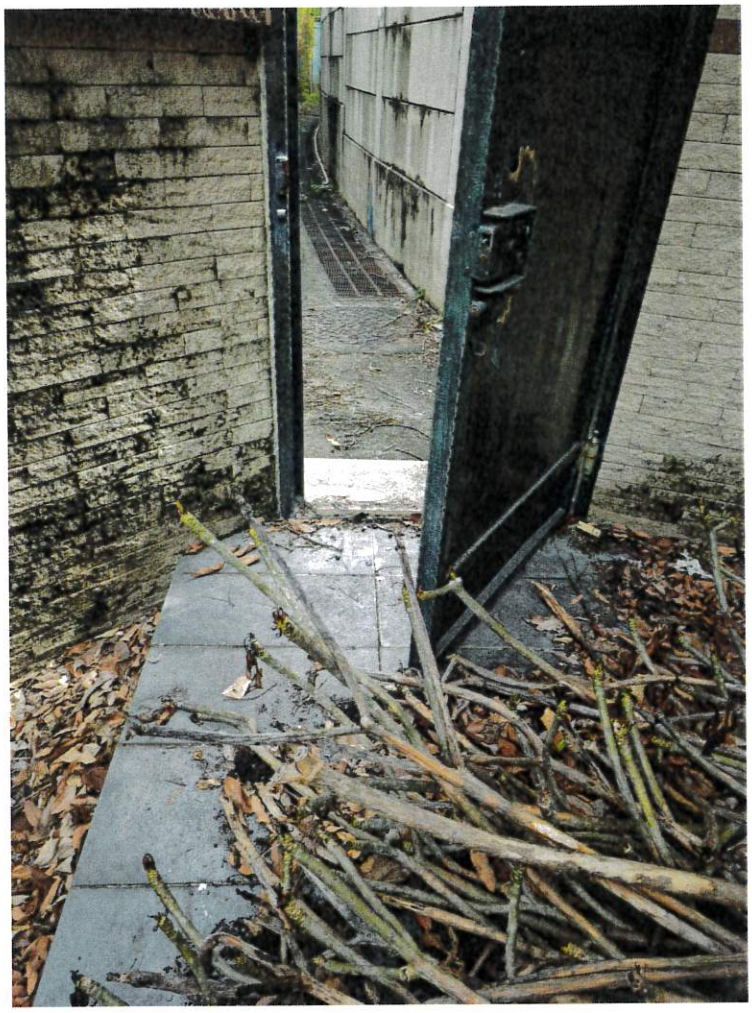
817625E

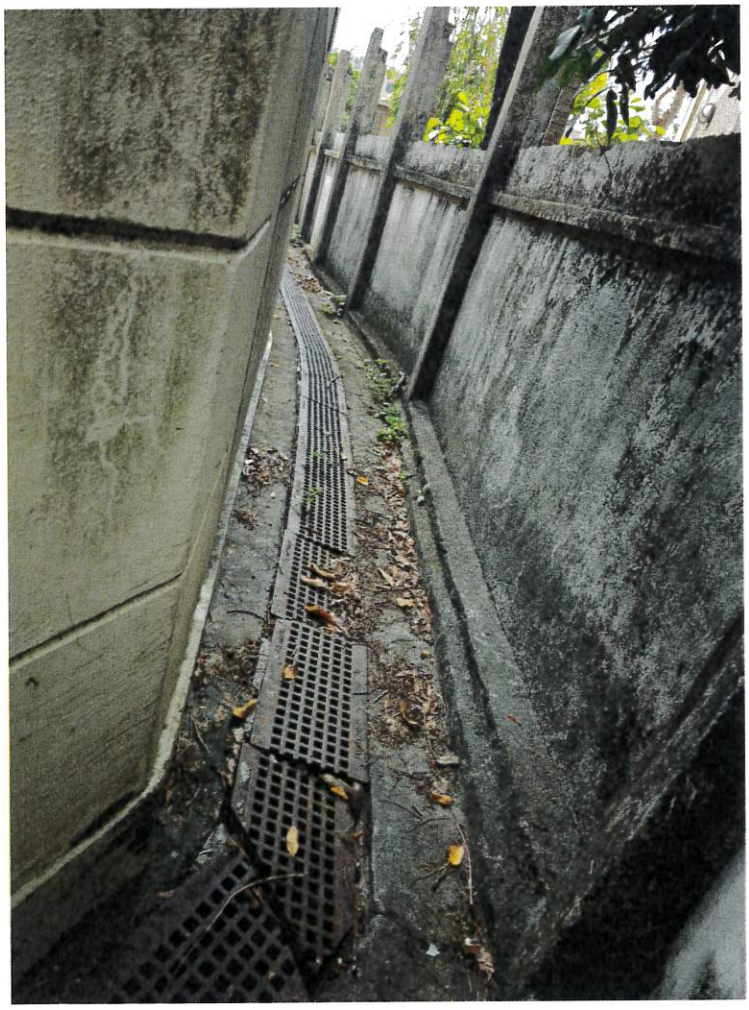
817700E

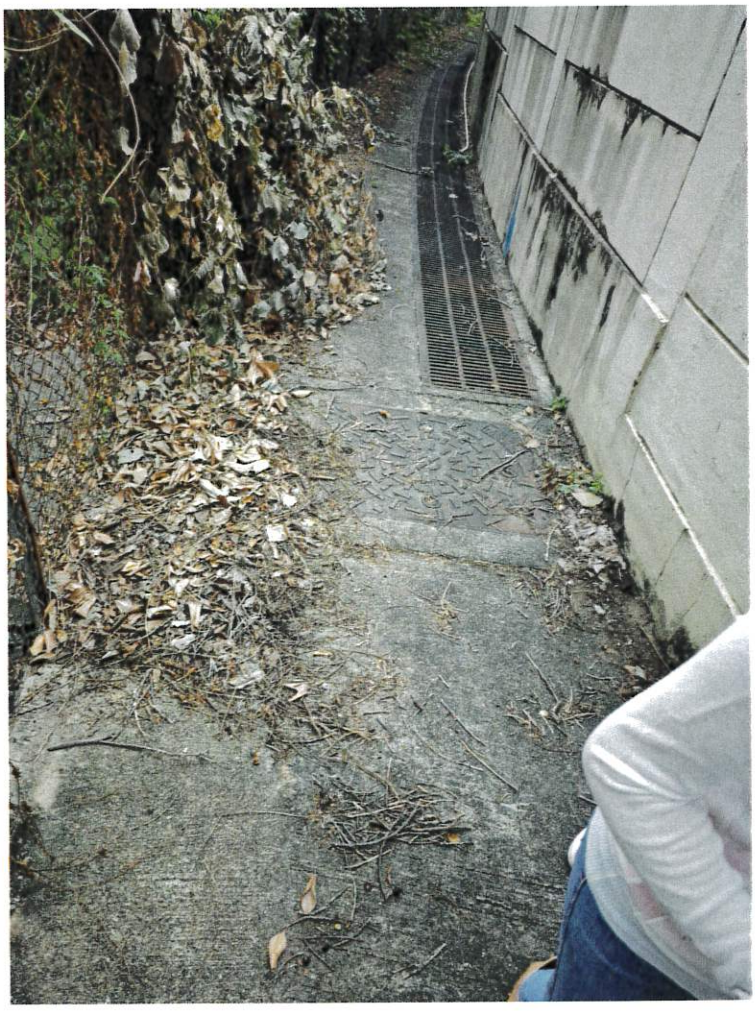
THE SITE

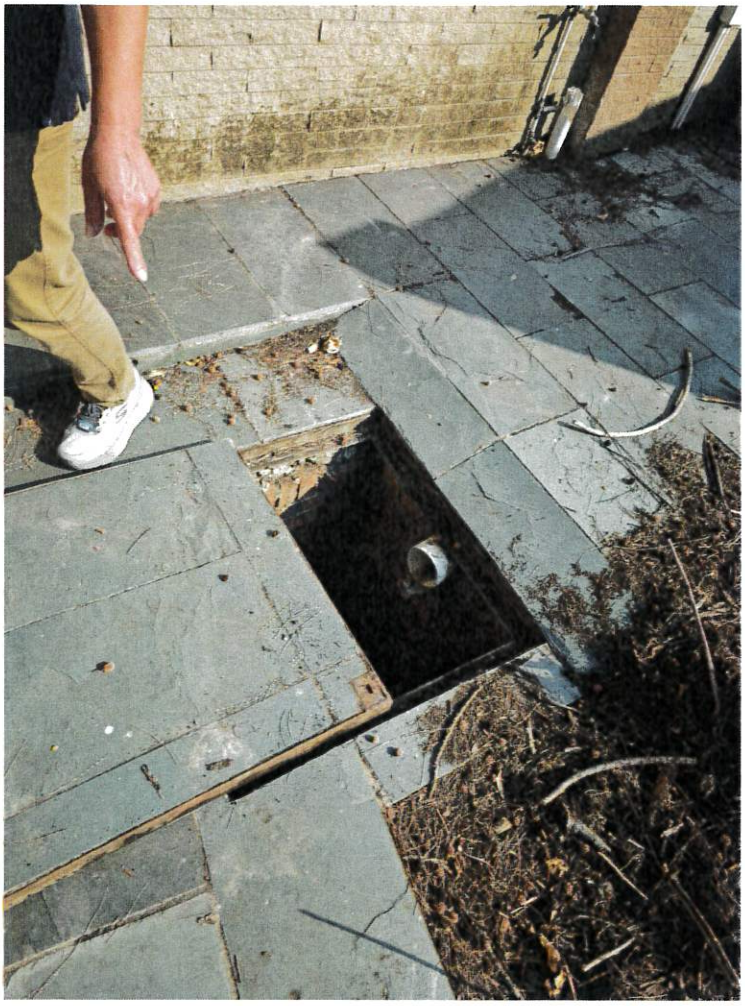
Please note that drainage information is now available in the GeoInfo Map services











# Appendix C

## Design Calculation

Summary of Runoff Evaluation at lot 3971 RP in D.D.124

| Aessment of surface run off | | | | | |
|---|---|---|---|---|---|
| Zone | Area ( sq m) | C | duration min | i mm/hr | Qp m^3/ s |
| A | 140 | 0.13 | 1 | 280 | 0.00142 |
| B | 150 | 0.13 | 1 | 280 | 0.00152 |
| C | 95 | 0.95 | 1 | 280 | 0.00703 |
| D | 170 | 0.95 | 1 | 280 | 0.01257 |
| E | 120 | 0.13 | 1 | 280 | 0.00121 |
| F | 180 | 0.13 | 1 | 280 | 0.00182 |
| G | 240 | 0.13 | 1 | 280 | 0.00243 |
| H | 295 | 0.95 | 1 | 280 | 0.02181 |
| | 1390 | | | | 0.04981 |

Note: $Q_P$ = area x C x I x 0.278/1000000

Run off cefficient at concrete, tiles etc= 0.95
Run off cefficient at flat grassland etc= 0.13

Assessment of Flow at differnet sections

| Section | from | to | cover area | Q (m^3) | drains adopted | | capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| A- C6 | A | C6 | F | 0.00182 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| C6-C1 | C6 | C1 | F& H | 0.02363 | 300mm U-channel | < | 0.09671 | m^3 | OK |
| C1-ST | C1 | ST | F& H | 0.02363 | 300 dia PVC pipe | < | 0.6221 | m^3 | OK |
| | | | | | | | | | |
| B-C3 | B | C3 | E | 0.00121 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| C3-C2 | | | E | 0.00121 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| | | | | | | | | | |
| C-C5 | C | C5 | A | 0.00142 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| C5-C4 | C5 | C4 | A & C | 0.00845 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| C4-C2 | C4 | C2 | A,B,C &D | 0.02253 | 225mm U-channel | < | 0.0449088 | m^3 | OK |
| | | | | | | | | | |
| C2-ST | C2 | ST | A,B,C,D &E | 0.02374 | 150 dia PVC pipe | < | 0.1108 | m^3 | OK |
| | | | | | | | | | |
| D-ST | D | ST | G | 0.00243 | 150mm U-channel | < | 0.0152 | m^3 | OK |
| | | | | | | | | | |
| ST-M1 | ST | M1 | ALL | 0.0498 | 300 dia PVC pipe | < | 0.6221 | m^3 | OK |
| | | | | | | | | | |
| M1-SMH1038641 | M1 | SMH1038641 | ALL | 0.0498 | 300 dia PVC pipe | < | 0.6221 | m^3 | OK |

Note: Qp = area x C x I x 0.278/1000000

R = area of crossection of channel/ Perimeter

Vel = R ^1/6 x $\sqrt{}$(R x Sf) / n (Manning's Formula)

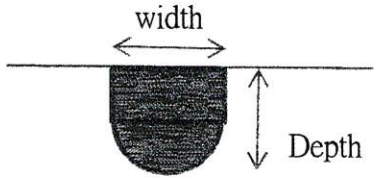
Capacity of pipe = Vel x section area of U-Channel

Checking of capacity of existing & proposed U-Channel related with the site

Gradient for drain= 1 in 200

| section | R | sf | n | vel | Area | Qp |
|---|---|---|---|---|---|---|
| 150 U-channel | 0.052075 | 0.005 | 0.013 | 0.758511 | 0.02008125 | 0.0152319 |
| 225 U-channel | 0.078113 | 0.005 | 0.013 | 0.993935 | 0.0451828 | 0.0449088 |
| 300 U-channel | 0.10415 | 0.005 | 0.013 | 1.204061 | 0.080325 | 0.0967162 |

| Channel information | | | | |
|---|---|---|---|---|
| width | deep | Area | Perimeter | R |
| m | m | m^2 | m | m |
| 0.15 | 0.15 | 0.02008125 | 0.38562 | 0.052075 |
| 0.225 | 0.225 | 0.045182813 | 0.57843 | 0.078113 |
| 0.3 | 0.3 | 0.080325 | 0.77124 | 0.10415 |




Design of capacity of Pipe flow by Colebrook-White's equation

300mm dia PVC pipe

Ks, roughness value= 0.003 mm (Table 14 in Stormwater Drainage Manual

Ks 0.000003 m

R, hydraulic Radius (A/P) = 0.15 m

Sf, friction gradient = 0.005

v, kinematic viscosity = 9.048E-07 m^2/s at 25℃

A = $\sqrt{}$(32 * g * R*Sf) = 0.4852216

B= log[ Ks/(14.8*R) +1.25*v/(R*A)] = -4.536811927

V= -A*B 2.20135914 m/s

Flow =V * area= 0.62210409 cu m

Design of capacity of Pipe flow by Colebrook-White's equation

150mm dia PVC pipe

| | | | |
|---|---|---|---|
| Ks, roughness value= | 0.003 mm | (Table 14 in Stormwater Drainage Manual | |
| Ks | 0.000003 m | | |
| R, hydraulic Radius (A/P) = | 0.075 m | | |
| Sf, friction gradient = | 0.006 (= 0.15/24.6) | | |
| v, kinematic viscosity = | 9.048E-07 m^2/s | at 25℃ | |
| A = | √(32 * g * R*Sf) = | 0.37585103 | |
| B= | log[ Ks/(14.8*R) +1.25*v/(R*A)] | = | -4.172958472 |
| V= -A*B | 1.56841076 m/s | | |
| | | | |
| Flow =V * area= | 0.11080822 cu m | | |

Design of sand trap

use 3.25m long x750mm wide x 1.1m deep sand trap

| | | |
|---|---|---|
| | 2.5 m | |
| h= | 1.1 m | |
| X= | 200 | |
| B= | 1.2 m | |
| total volume retained = | 2.5x1.2x1.1+1.2x0.10x0.75 | 2.99 m^3 > 60 x 0.049=2.988 m^3 |

**U-Channel Schedule**

| U-Channel | | From | | | To | | | | |
|---|---|---|---|---|---|---|---|---|---|
| number | size(mm) | point | Cover Lev +mPD | Inver Leve +mPD | point | Cover Lev +mPD | Inver Leve +mPD | Length m | Gradient |
| UC1(existing) | 300 | C6 | 10.22 | 9.92 | C1 | 10.22 | 9.82 | 20.0 | 0.005 |
| UC2 | 150 | A | 10.34 | 10.14 | C6 | 10.22 | 9.92 | 18.7 | 0.011765 |
| UC3 | 225 | B | 10.5 | 10.30 | C3 | 10.38 | 10.22 | 8.0 | 0.01 |
| UC4 | 225 | C4 | 10.34 | 10.01 | C2 | 10.37 | 9.95 | 8.5 | 0.007059 |
| UC5 | 225 | C5 | 10.34 | 10.05 | C4 | 10.34 | 10.01 | 5.8 | 0.006897 |
| UC6 | 150 | C | 10.33 | 10.15 | C5 | 10.34 | 10.05 | 15.5 | 0.006452 |
| UC7 | 150 | D | 10.42 | 10.20 | ST | 10.33 | 10.10 | 16.8 | 0.005952 |
| UC8 | 150 | C3 | 10.38 | 10.15 | C2 | 10.37 | 10.10 | 4.2 | 0.011905 |
| | | | | | | | | | |
| existingpipe | Dia (mm) | | | | | | | | |
| P1 | 300 | M1 | 10.44 | 9.34 | SMH1035641 | 9.79 | 8.50 | 5.5 | |
| P2 | 300 | ST | 10.33 | 9.36 | M1 | 10.44 | 9.34 | 3.5 | |
| P3 | 300 | C1 | 10.22 | 9.82 | ST | 10.33 | 9.80 | 3.6 | |
| P4 | 150 | C2 | 10.37 | 9.82 | ST | 10.33 | 9.70 | 24.3 | |

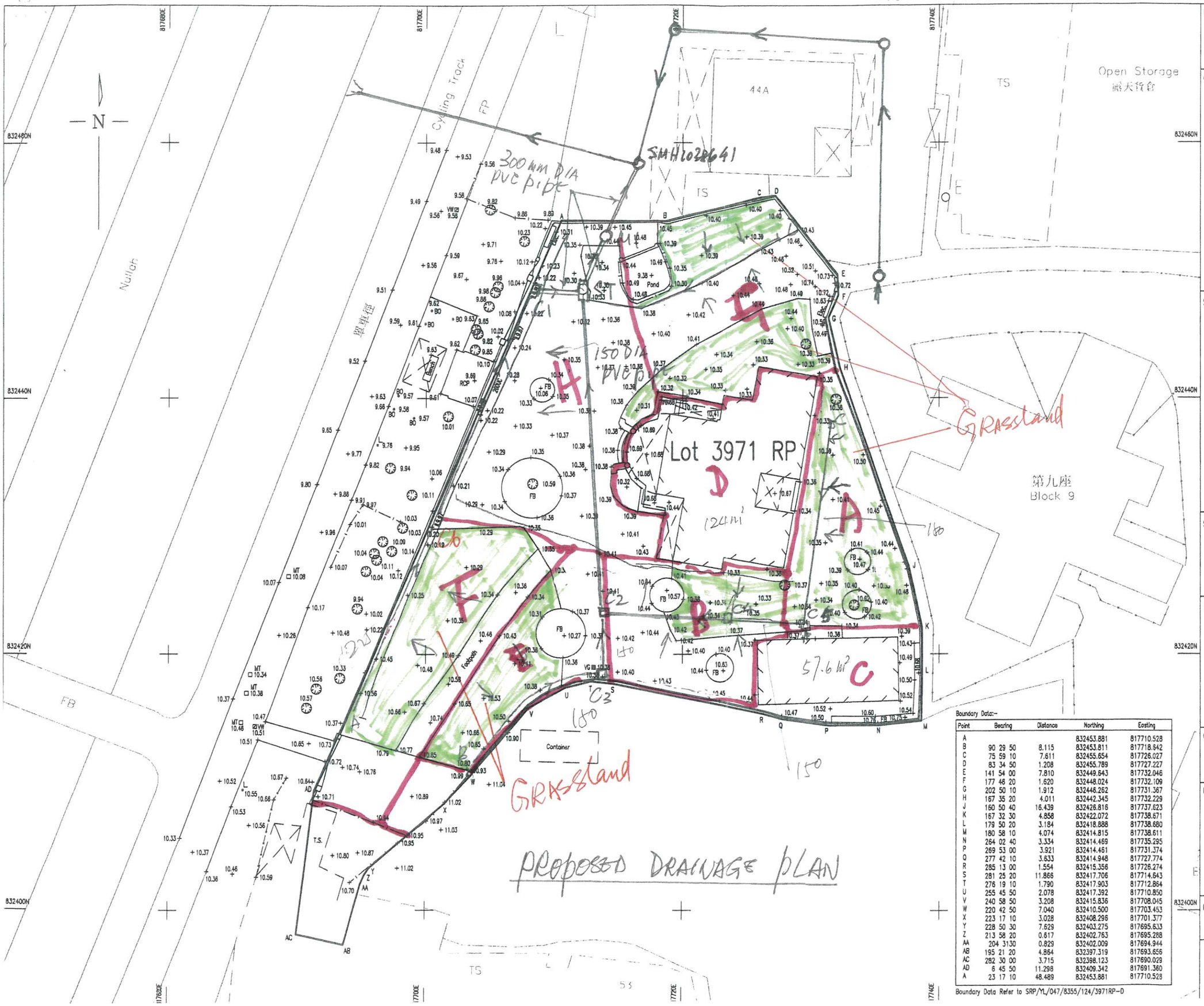
Note:

Sand Trap are designated as ST
Catchpit is designated as C1,,,,etc
Proposed U-Channel as UC1,⋯etc
existing pipe as P1

## Manhole and Catchpit Schedule

| Number | Nature | Cover Level (PD) | Invert Level(PD) | Width(mm) | Length(mm) |
|---|---|---|---|---|---|
| SMH1035641 | DSD M/H | 9.79 | 6.96 | | |
| M1 | Existing M/H | 10.44 | 9.34 | 750 | 750 |
| ST | Proposed Sand Trap | 10.33 | 9.26 | 1200 | 3250 |
| C1 | Proposed Catchpit | 10.22 | 9.72 | 750 | 750 |
| C2 | Proposed Catchpit | 10.37 | 9.72 | 750 | 750 |
| C3 | Proposed Catchpit | 10.38 | 10.1 | 750 | 750 |
| C4 | Proposed Catchpit | 10.34 | 9.9 | 750 | 750 |
| C5 | Proposed Catchpit | 10.34 | 9.95 | 750 | 750 |
| C6 | Proposed Catchpit | 10.20 | 9.82 | 750 | 750 |

Scale 1:213




Notes

1. Hong Kong Geodetic Datum 1980
2. All levels refer to Principal Datum Hong Kong
3. All units are in Metres
4. All spot level positions are indicated by the decimal point or a cross.

Abbreviations

| | | | |
|---|---|---|---|
| BB | SIGN BOARD | ME | MANHOLE (ELECTRIC) |
| BD | BOULDER | MF | MANHOLE (FOUL WATER) |
| BH | BORE HOLE | MH | MANHOLE |
| BO | BOLLARD | MP | METER POST |
| CB | CONCRETE BLOCK | MS | MANHOLE (STORM WATER) |
| CL | COVER LEVEL | MT | MANHOLE (TELEPHONE) |
| CO | COLUMN | RCP | REFUSE COLLECTION POINT |
| CP | CATCHPIT | SC | STEP CHANNEL |
| CUL | CULVERT | SHR | SHRINE |
| DP | DRAW PIT | SP | SIGN POLE |
| EB | ELECTRIC BOX | ST | STOOL |
| EP | ELECTRICITY POST | TC | TELEPHONE CHAMBER |
| ESS | ELECTRIC SUB-STATION | TL | TRAFFIC LIGHT |
| ET | ELECTRIC TRANSFORMER | TP | TELEPHONE POLE |
| FB | FLOWER BED | TS | TEMPORARY STRUCTURE |
| FH | FIRE HYDRANT | TV | MANHOLE (CABLE TV CO) |
| FIG | FEEDS INTO GROUND | UC | U CHANNEL |
| FP | FOOTPATH | V | VALVE |
| GA | GRATING | VF | VALVE FIRE |
| GU | GULLY | VG | VALVE GAS |
| IC | INSPECTION COVER | VT | VENT |
| IL | INVERT LEVEL | VW | VALVE-WATER WORKS |
| LB | LETTER BOX | WT | WATER TANK |
| L | LAMP POST | WP | WATER POINT |

Symbols

- ARTIFICIAL SLOPE
- BOUNDARY LINE
- BOUNDARY POINT
- BOULDER
- CANOPY
- 5 CONTOUR (5m)
- 1 CONTOUR (1m)
- DRAIN
- FENCE/RAILING
- FREE STANDING WALL
- GATE
- H HOARDING
- SLOPE TOP / BOTTOM LANDSLIDE SCAR
- S SEPTIC TANK
- STEPS
- TREE
- 150UC U-CHANNEL WITH FLOW & SIZE
- VERTICAL CUTTING

Sheet Index


Approved

Helen Chan
ALS, MHKIS, MRICS, R.P.S.(LS)
Date: November 7, 2025

Boundary Data:-

| Point | Bearing | Distance | Northing | Easting |
|---|---|---|---|---|
| A | | | 832453.881 | 817710.528 |
| B | 90 29 50 | 8.115 | 832453.811 | 817718.642 |
| C | 75 59 10 | 7.611 | 832455.654 | 817726.027 |
| D | 83 34 50 | 1.208 | 832455.789 | 817727.227 |
| E | 141 54 00 | 7.810 | 832449.643 | 817732.046 |
| F | 177 46 20 | 1.620 | 832448.024 | 817732.109 |
| G | 202 50 10 | 1.912 | 832446.262 | 817731.367 |
| H | 167 35 20 | 4.011 | 832442.345 | 817732.229 |
| J | 160 50 40 | 16.439 | 832426.816 | 817737.623 |
| K | 167 32 30 | 4.858 | 832422.072 | 817738.671 |
| L | 179 50 20 | 3.184 | 832418.888 | 817738.680 |
| M | 180 58 10 | 4.074 | 832414.815 | 817738.611 |
| N | 264 02 40 | 3.334 | 832414.469 | 817735.295 |
| P | 269 53 00 | 3.921 | 832414.451 | 817731.374 |
| Q | 277 42 10 | 3.633 | 832414.948 | 817727.774 |
| R | 285 13 00 | 1.554 | 832415.356 | 817726.274 |
| S | 281 25 20 | 11.866 | 832417.706 | 817714.643 |
| T | 276 19 10 | 1.790 | 832417.903 | 817712.864 |
| U | 255 45 50 | 2.078 | 832417.392 | 817710.850 |
| V | 240 58 50 | 3.208 | 832415.836 | 817708.045 |
| W | 220 42 50 | 7.040 | 832410.500 | 817703.453 |
| X | 223 17 10 | 3.028 | 832408.296 | 817701.377 |
| Y | 228 50 30 | 7.629 | 832403.275 | 817695.633 |
| Z | 213 58 20 | 0.617 | 832402.763 | 817695.288 |
| AA | 204 3130 | 0.829 | 832402.009 | 817694.944 |
| AB | 195 21 20 | 4.864 | 832397.319 | 817693.656 |
| AC | 282 30 00 | 3.715 | 832398.123 | 817690.029 |
| AD | 6 45 50 | 11.298 | 832409.342 | 817691.360 |
| A | 23 17 10 | 48.489 | 832453.881 | 817710.528 |

Boundary Data Refer to SRP/YL/047/8355/124/3971RP-D

Client

Yat Tak Kwun Management Limited

Drawing Title

Topographic Survey of
Lot 3971 RP in D.D.124
45 Tan Kwai Tsuen, Hung Shui Kiu

Drawing No. HPL3507/TS/01

Scale 1:200(A2)


Helen Chan Professional Land Survey Ltd.
陳婉琪測量師行有限公司
2/F, No.36 Lung Sum Avenue, Sheung Shui, N.T., Hong Kong
Tel: 26395466 Fax: 26734966

## 6.2 Environmental Considerations

(a) No joss paper furnace

Considering the relative distance with the residential areas, the applicant will not provide joss paper furnace on site. Visitors can only perform memorial activities in an environmentally friendly way and burning of joss paper associated with worship and memorial services will not be allowed at the site.

(b) Air Quality

No substantial Addition & Alteration (A & A)Works shall be carried out. As the proposed columbarium buildings have been renovated, there will not be any large scale construction work involving demolition of existing structure during modification the interior of the existing building for the proposed use.

No kitchen and catering services or vegetarian food will be provided in the development during operation.

The site is currently accessed via a footpath from Tan Kwai Tsuen Road. Vehicular traffic to the site is almost not possible. Thus emission from the vehicles shall be unlikely happen

It is therefore considered that the operation of the columbarium will not cause any significant adverse air quality impact to the potential ASRs at the vicinity.

(c) Noise

As the proposed columbarium was already provided within the existing buildings, no civil and structural alteration works will be required.The proposed toilet in the first floor of Building 1 shall involve A & A works inside the building and noise generated by which is easily controlled.

Noisy religious ceremony will not be allowed in the columbarium operation. No construction noise nuisance and no operative noise nuisanceis therefore envisaged at the identified ASRs and in the vicinity.

(d) Waste Management

There shall be no major construction nor A & A works will be undertaken within or outside the existing building. Negligible construction waste is therefore envisaged to be generated or disposed of. The small amount of construction waste will be collected and disposed of at landfills. The measures recommended in the ProPECC PN 2/24 will be implemented during the renovation works to minimize the generation of construction waste.

As no kitchen and food catering services will be provided and no burning of joss paper will be allowed at the proposed columbarium, the potential waste generated during the operation of the columbarium will be limited to general refuse from the visitors. This general refuse will be collected twice a day and disposed of at nearby refuse collection points. Sufficient rubbish bins will be provided within the site.

(e) Water Quality

As there shall be no major construction (which includes any excavation works) nor any A & A works to be carried out in the subject site, and that all the surface run off will be collected and filtered via a terminal desilting sand trap prior to discharging to the adjacent DSD manhole, adverse impact to the water quality is not anticipated

With the implementation of good management practice and control measures to reduce the generation of waste and secondary nuisances (such as water quality), adverse environmental impact due to waste management is not anticipated.

## 6.3 Sewerage

6.3.1 Toilet Facility installed at the First Floor of Building 1 will be provided for the management of the columbarium only. Additional mobile toilets, however, will be supplement in those Special Days for visitors.Number of managing staff during normal days is about 1-3. Amount of mobile toilets shall be assessed and reviewed from time to time.

6.3.2 The sewage generated from the subject toilet at the First Floor of Building 1 will be collected at the existing traditional septic tank at the vicinity of Building 1 about 50m from the adjacent nullah. The existing septic tank, which had been designed for the

original residences over half a century ago, shall be deemed to be adequate for the management staff. The sewage and waste from those mobile toilets deployed for Special Days will be collected from time to time by registered licensed collectors. The catalogue of the mobile toilets provider is attached in the **Appendix 1** for reference.

## 6.4 Tree Preservation and Landscape Proposal

(a) Summary of Tree preservation and landscape proposal

This proposal was based on the Tree Preservation and Landscape Proposal(to be submitted after approval of planning statement) prepared by MessrsLanDes, a landscaping consultant in 2013. The 14 numbers of treesexisting in 2013, however, was reduced to 4 numbers during several typhoons during the last 13 years. Among them the Typhoon Mangkhutin 2018 was one of the severeone. These remaining trees on site will be preserved. In order to provide quality landscape for the proposed development soft landscape works and new trees will be provided.

(b) Landscape Assessment

A tree survey has been carried out on 13th June 2012. A total of 14 nos. of trees within site boundary were recorded. The dominant tree species is Euphoria longan. The remaining trees, i.e. Araucaria heterophylla, Celtis sinensis and Plumeria rubra var.acutifola are also common plantation species in Hong Kong. 4 nos. of tree respectively T03, T04, T04 and T09 as stipulated in the Tree Survey Schedule included in the Proposal was damaged and removed off site during the TyphoonMangkhut in 2018.

The aim of the landscape proposals is to respond to site conditions, building form and function and to provide a quality landscape scheme. The main factors to be taken into consideration are:

- Response to the site context, both in terms of landscape character and visual amenity.
- Response to the existing buildings and its architectural style.
- Creation of a green setting by maximizing the opportunity for soft landscape.
- Enhancement of the local biodiversity.

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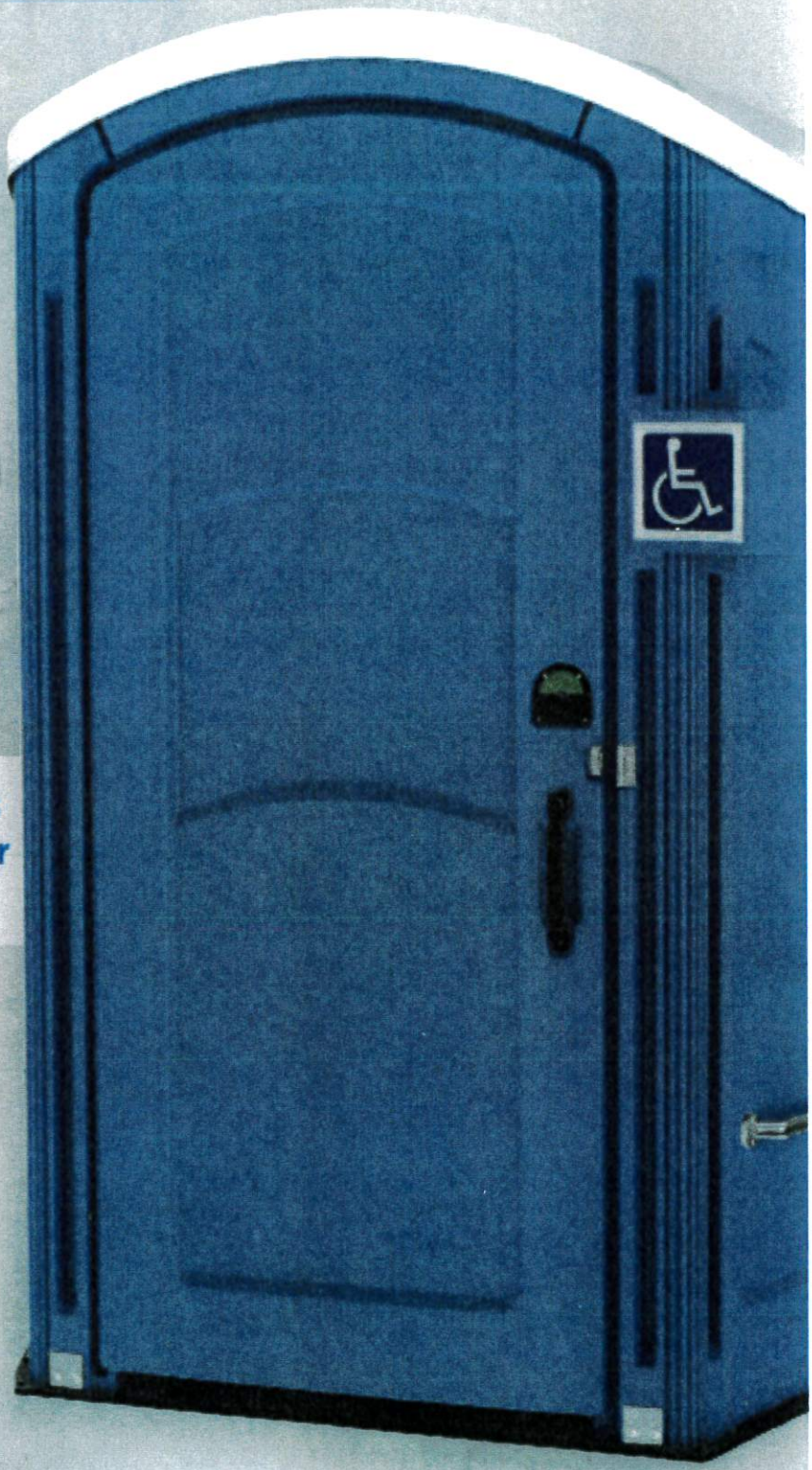
# FREEDOM

"For an ADA & Title 24 compliant restroom, look no further than the spacious Freedom."



DIGNITY

**Portable restrooms greatly improve our standard of living.**

The new Freedom is smaller, lighter, sturdier and less expensive than other models while remaining the only fully ADA and Title 24 compliant restroom on the market. With this many benefits, operators will find the new Freedom easier to handle, maintain and afford.

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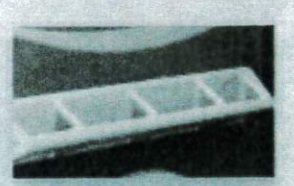
# 50 pounds lighter and increased strength.

## features

Multiple roof tie-down options when transporting



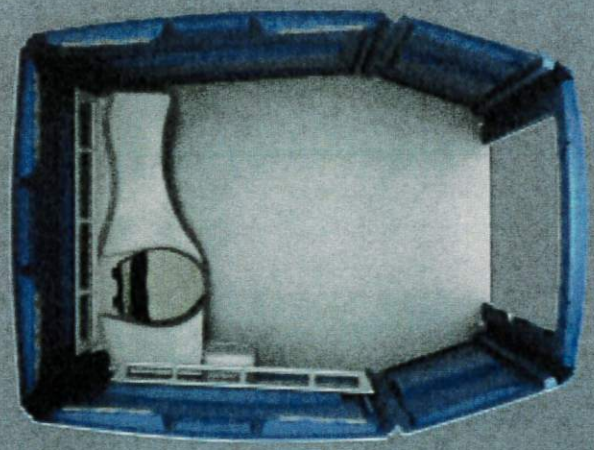
Heavy-duty plastic handrail system

## structure

Unique "living hinge" on front corners adds strength and stability

Extended roof fits tightly over side walls for added strength

To improve handling and quality, the Freedom is fifty pounds lighter and has a unique front design featuring "living hinge" corners and a built-in, interlocking door hinge to eliminate door sag. The living hinge on each front corner acts like a shock absorber when struck by a fork lift or dropped off a trailer. Additionally, the capped roof and stainless steel front floor brackets combine with the front to form a superior ADA restroom.



*Standard 68 gallon tank*

## specs

**Height:** 90" (2286mm)
**Width:** 67" (1702mm)
**Depth:** 86.5" (2197mm)
**Weight (standard tank):** 310 lbs. (141 kg.)
**Weight (small tank):** 299 lbs. (136 kg.)
**Seat Height:** 18.75" (476mm)
**Standard Tank Volume:** 68 gal. (257L)
**Optional Tank Volume:** 35 gal. (132.5L)

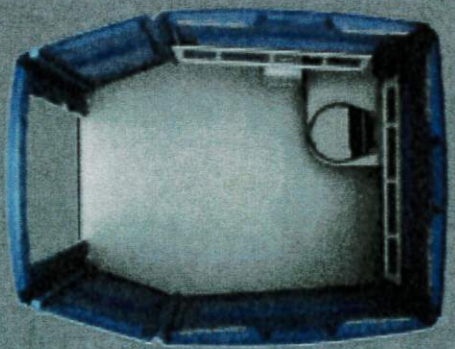
Specifications subject to change without notice.

## colors

Royal Blue, Teal, Forest Green, Sand, Gray

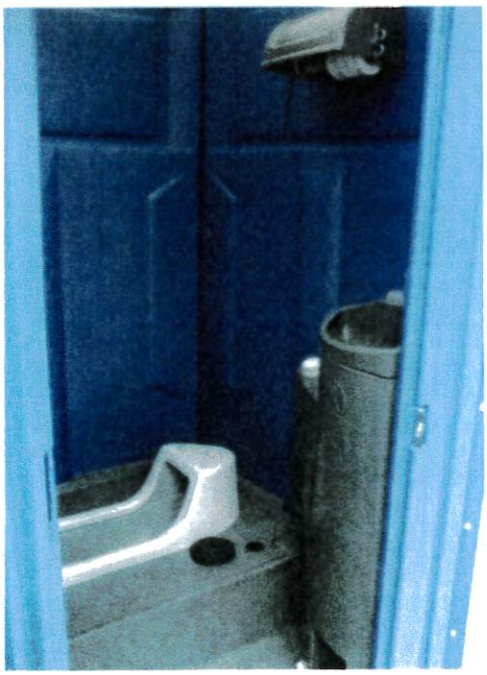
## reviews

**"A light, sturdy ADA compliant restroom that is easy to handle and transport. It has an inviting appearance and is easy to enter and exit."**



*Optional 35 gallon tank**

*NOTE: Only with the 35 gallon tank is the Freedom both ADA and California Title 24 compliant.




防紫外线透光屋顶
排气管
防蚊透气纱窗
纸巾盒
小便斗
便斗及冲水系统
洗手盆

## *Tufway 500L Squatting Style with fresh water flush*

*Classic service with fresh water flush and large capacity waste tank (squatting style)*

- Size: H: 2.38m x W: 1.12m x D: 1.22m
- Net weight: approximately 240lb. (109kg.)
- Holding tank volume: approximately 500 liters (400 liters waste & 100 liters fresh water)
- Usage: approximately flushing 640 times after each service
- Toilet bowl with flapper to hide waste
- Separate Urinal
- Separate hand wash sink is optional
- Cabana is made from High Density Polyethylene, very durable. Product life can be over 10 years
- Easy to move around, clean and maintain.

*Tufway 500L interior look squatting style with toilet bowl and fresh water flush.*

tidy & fresh • ti

attachment C

# Landscape Comments : Refer to 2 July, 2025

1. Point no.3 :

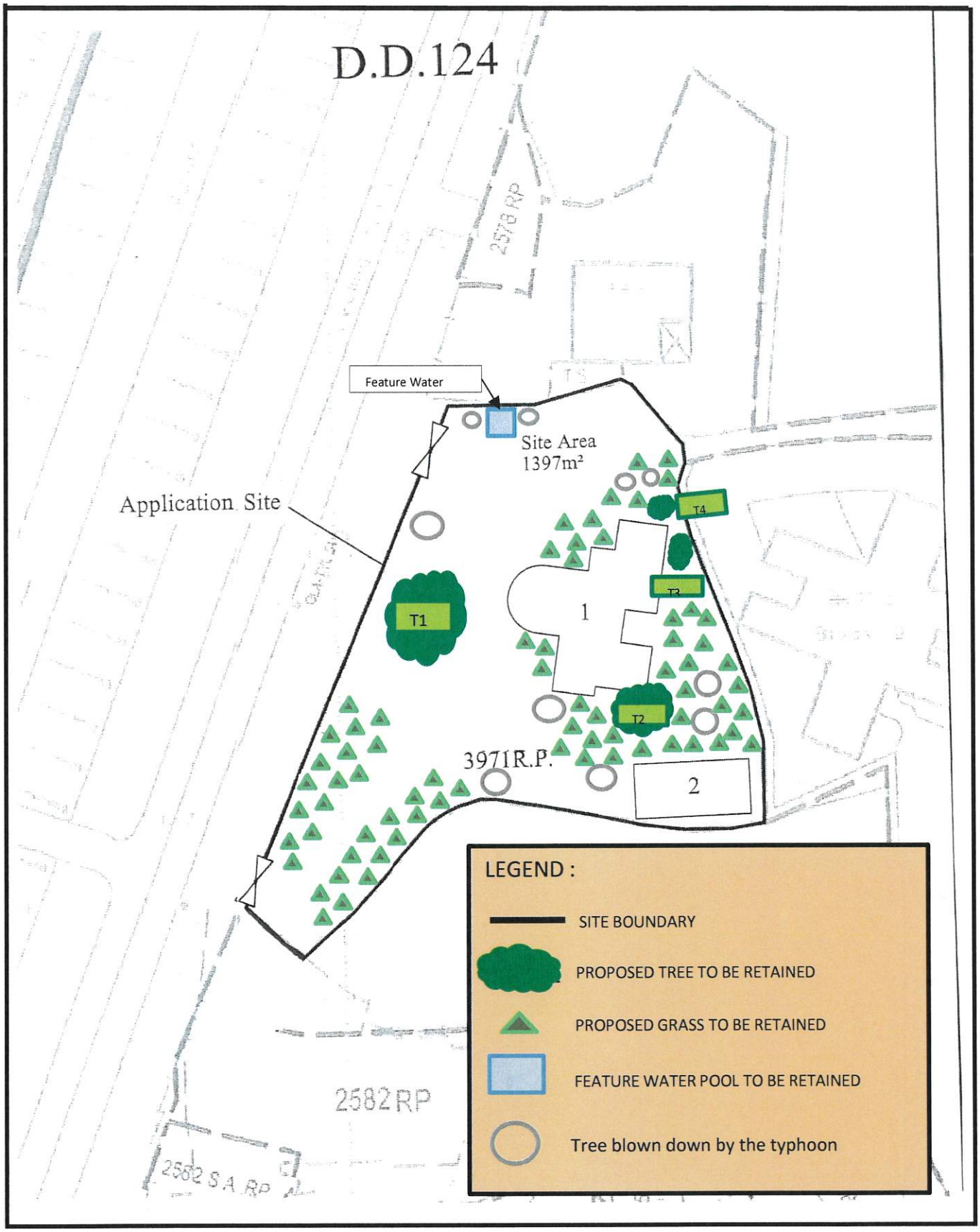
   The Tree Survey Plan in APPENDIX A to illustrate the information that are up-to-date on existing tree , including the tree landscape and location.
   Tree Survey Schedule in APPENDIX B to illustrate the information that the tree species, proposed treatments and the conservation status .
   Photographic Record Of Exising Trees in APPENDIX C.

2. Point no.4 :
   Landscape Master Plan in APPENDIX D is to respond to site conditions, both in terms of landscape character and visual amenity.
   There are trees in the surrounding area, a soft and green landscape has already been created.
   Add green sun umbrellas , protecting guests to provide a safe and healthy environment. It can also enrich the green landscapes.

# APPENDIX A

# TREE SURVEY PLAN

# YAT TAK KWUN - LATEST INFORMATION ON EXISTING TREES




| |
|---|
| **PROJECT :** Proposed Columbarium at Lot No.3971 RP (Part) in D.D.124 |
| **DRAWING TITLE :** Latest information on existing trees |
| **DRAWING No. : YTK - T01** |
| **DATE OF ISSUE : 2/12/2025** |
| **DESIGN BY :** Longlife (Agency) Limited - Freeon Wong |

# APPENDIX B

# TREE SURVEY SCHEDULE

Tree Assessment Schedule

Proposed Religious Institutions (temples) in Lot 3971 RP,D.D.124,Tan Kwai Tsuen, Yuen Long

Prepared By Longlife (Agency) Limited on 02.12.2025

| Tree | Name | | Original Location | Size | | | Form | Health | Amenity Value | Survival Rate after Transplantation | Proposed Treatment | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Botancial Name | Chinese Name | ( Within Lot / Outside Lot ) | DBH (m) | Height (m) | Spread (m) | (Good/Fair/Poor) | (Good/Fair/Poor) | (High/Med/Low) | (High/Med/Low) | (Retain/Fell/Transplant) | |
| T1 | Ficus microcarpa | 細葉榕 | Within Lot | 0.9 | 12 | 9 | Fair | Fair | Med | Low | Retain | - |
| T2 | Ficus variegate | 青果榕 | Within Lot | 0.7 | 13 | 9 | Poor | Fair | Med | Low | Retain | co-dominant stems |
| T3 | Litsea monopetala | 假柿樹 | Within Lot | 0.43 | 13 | 7 | Fair | Fair | Med | Low | Retain | - |
| T4 | Euphoria longan | 龍眼 | Within Lot | 0.27 | 9 | 5 | Fair | Fair | Med | Low | Retain | - |

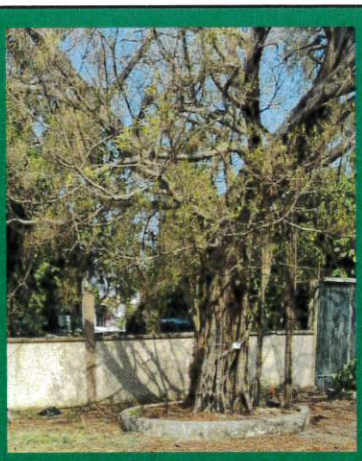
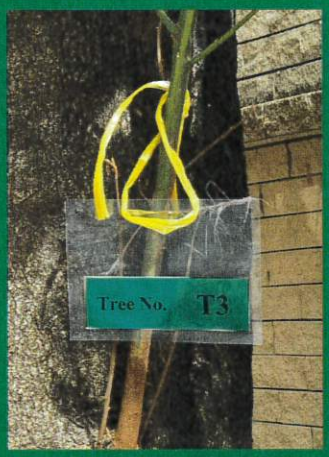
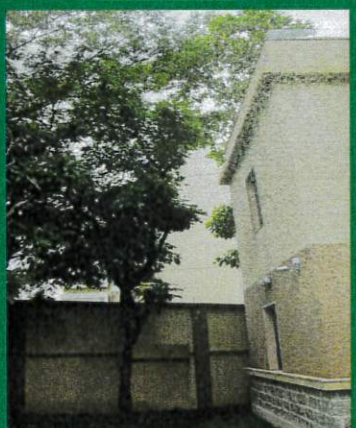
# APPENDIX C

# PHOTOGRAPHIC RECORD

# OF

# EXISTING TREES

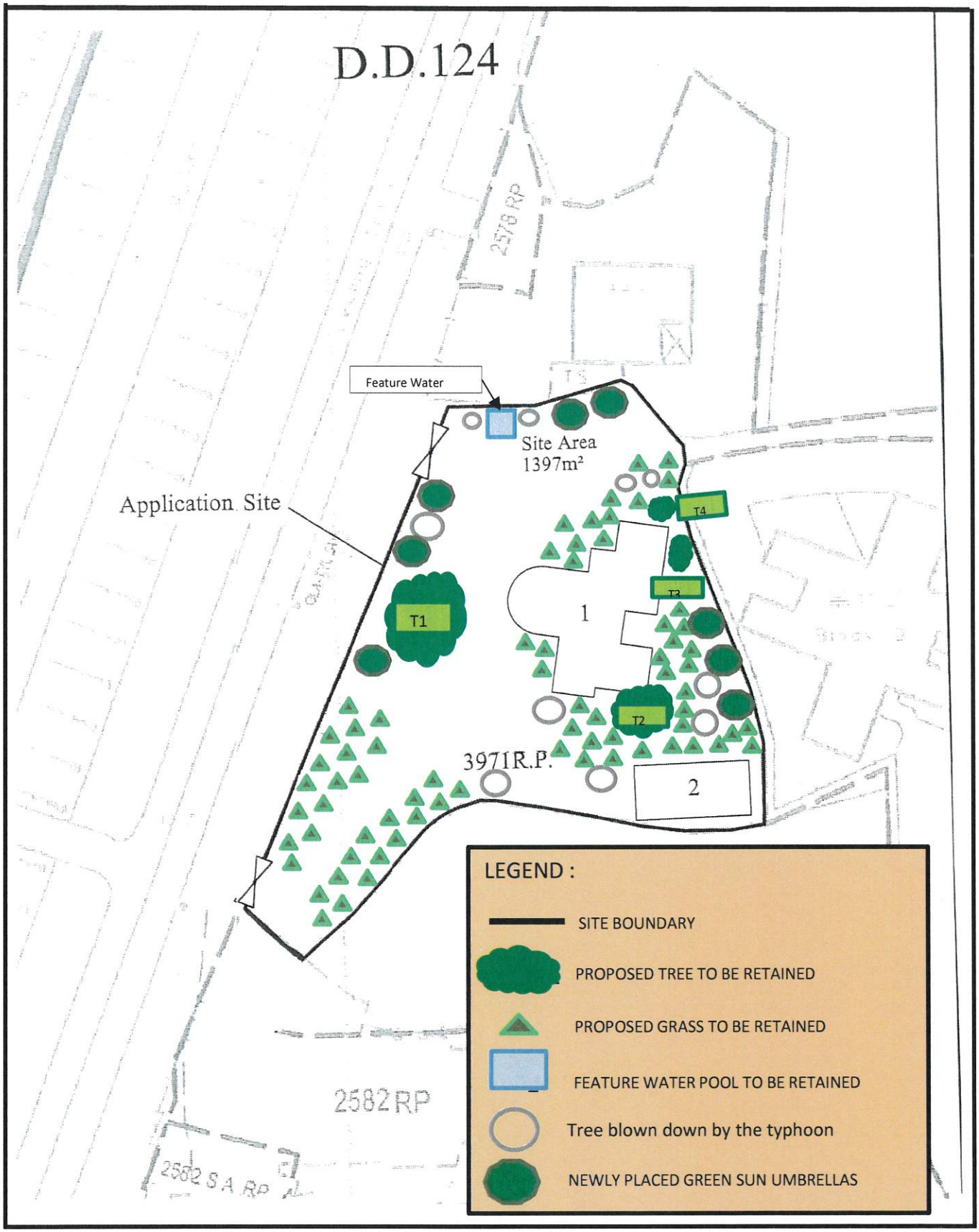
# PHOTOGRAPHIC RECORD OF EXISTING TREES

| | |
|---|---|
| **Tree No. T1** |     |
| **Tree No. T2** |    |
| **Tree No. T3** |     |
| **Tree No. T4** |    |

# APPENDIX D

# LANDSCAPE MASTER PLAN

# YAT TAK KWUN - PROPOSED LANDSCAPE DESIGN DRAWINGS




| |
|---|
| **PROJECT :** Proposed Columbarium at Lot No.3971 RP (Part) in D.D.124 |
| **DRAWING TITLE :** PROPOSED LANDSCAPE DESIGN DRAWINGS |
| **DRAWING No. : YTK - T02** |
| **DATE OF ISSUE : 2/12/2025** |
| **DESIGN BY :** Longlife (Agency) Limited - Freeon Wong |

# 1. NEWLY PLACED GREEN SUN UMBRELLAS


| 規格 | 傘面直徑 | 傘下直徑 | 整傘高度 | 收納長度 |
|---|---|---|---|---|
| 2.2M | 2.4M | 2M | 2.4M | 1.19M |